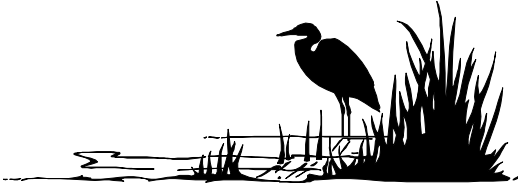


# Preventing Pollution of the Rio Grande: It's Up to Us!



In the Albuquerque area, **storm drains flow directly to the Rio Grande, with no treatment.** Storm water pollution may impact aquatic plants and animals, and wildlife habitat along the river. Common sources of river pollution include spilled or dumped motor oil, fuel, antifreeze and other fluids from vehicles and heavy equipment, construction debris, landscaping runoff containing pesticides or weedkillers, and paint products which are poured or spilled into a street or storm drain.

## The Dangers

Both water-based (latex) and oil-based (solvent-based) paints can have high heavy metal concentrations and volatile organic compounds (VOC's). Latex paints will typically have lower voc levels. VOC's are organic gases which are given off by any surface that was painted, stained or varnished. These gases can cause headaches, eye/skin irritation, nosebleeds, sinus problems, dizziness, fatigue and cancer.

The heavy metals in paint include **mercury** which was used as a biocide in paint up until 1991, when it was banned from use in interior water-based paints and voluntarily withdrawn from use by the industry in exterior water-based paints; however, mercury-containing biocides are still allowed in *exterior* water-based paints. A good rule of thumb is **don't use exterior paint indoors.**

Another heavy metal found in paint is **lead**. Lead was used extensively in paint as a pigment stabilizer until 1978 when it was discovered that it poses a significant health risk. The amount of lead allowed in paint for residential use was limited to .06% or less; hence even

*“lead-free” paint can contain a small amount of lead.* Lead paint has not been banned from use altogether and is still used extensively for industrial surfaces. For more information on the dangers of lead from paint in place, refer to the telephone numbers at the end of this pamphlet.

Oil-based paints contain toxic pigments, ethylene, aliphatic hydrocarbons and fungicides and can cause serious health hazards such as skin, eye, nose and throat irritation, as well as dizziness, headache and nausea. Prolonged exposure via inhalation may lead to liver, kidney or respiratory damage, nervous-system disorders, birth defects and possibly cancer. Furthermore, **oil-based paints are extremely flammable**, whereas water-based paints are not.

## Reduce Your Risk

When working with oil-based paints, you will see the words: “Warning Flammable” or “Caution Combustible” on the label. It is important to take the following precautions when working with oil-based paints:

- Open all windows and doors for ventilation and to disperse fumes. Fans are not recommended because unless specially constructed, they can create sparks.
- Eliminate all sources of flame, sparks and ignition. Put out pilot lights by turning off the gas and do not relight until well after the room is free of fumes.
- Don't smoke while working with oil-based paints or paint products.
- Don't use electrical equipment which may spark when working with oil-based paints.
- Make sure light bulbs are not exposed to sudden breakage as this may cause a fire.
- Clean up all spills promptly. Insure safe disposal of spilled waste and solvent saturated clean-up materials.
- Keep paint containers closed when not in use.

## Paint Removal

- Chemical paint stripping residue and chips or dust containing lead are a *hazardous waste*.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up and disposed of as trash.
- Runoff from high-pressure cleaning of building exteriors should not enter storm drains. Runoff can be collected in a holding area, or check with the Wastewater Utility to find out if water can be disposed of in the sanitary sewer.

## What Can You Do?

- **Keep all liquid paint products and wastes away from the gutter, street and storm drains.**
- Liquid residues from paints, thinners, solvents, glues and cleaning fluids are hazardous wastes, however empty paint cans, brushes, rags and drop cloths may be disposed of as trash or at the landfill when they are *thoroughly dry*.
- **Never pour oil-based paints or paint products on the ground, down the storm drain, or in the sanitary sewer.**

## Safe Use

Minimize the hazards of painting by using these simple, common sense practices:

- Open all doors and windows to get ventilation. Do not use oil-based paints in deep basements, because solvent fumes can accumulate near the floor and are difficult to disperse.
- If your eyes water or you begin to feel dizzy or nauseous, leave the work area immediately and get plenty of fresh air. If discomfort persists or breathing difficulties occur, get medical help.

If you cannot get enough ventilation in the work area, use a respirator. A respirator is a breathing device designed to clean the air you breathe. There are many different types, but for oil-based paints, make sure the respirator is labeled: “NIOSH/MSHA Approved for Organic Vapors.” **You must first be trained before using a respirator.**

- Wear a long sleeve shirt and long pants when

- painting.
- Wear butyl rubber gloves. Not only will this protect the skin, it will make clean-up easier.
- Wear splash goggles.
- If you get oil-based paint on your skin, wash it off immediately with plenty of soap and water.
- If you get oil-based paint in your eyes, flush the eyes with cold water for fifteen minutes and obtain medical treatment.
- Protect pets from exposure to paint and paint fumes.

## Paint Related Products

**Paint Strippers** are either solvent, water or citrus-based. The solvent and water-based products contain methylene chloride which is extremely toxic, a known carcinogen and it is also corrosive and flammable. If you do choose to use these products, always follow the label directions *precisely* and provide adequate ventilation. A less toxic alternative would be sandpaper, a heat gun, good old fashioned elbow grease, or a citrus-based paint remover.

**Stains and finishes** are also toxic and flammable. A less toxic alternative would be water-based paint or natural earth pigment finishes.

**Wood Preservatives** may contain creosote or arsenic compounds. These are known cancer causers, extremely toxic and flammable. **DO NOT USE** products containing pentachlorophenol, creosote or arsenic. A less toxic alternative would be water-based wood preservative, linseed or tung oil, or rot-resistant wood.



## Equipment Cleanup

**Never clean brushes or rinse paint containers into the street, gutter or storm drain.**

- For water-based paints, paint out brushes to the fullest extent possible and rinse to the sanitary sewer.
- For oil-based paints, paint out brushes to the fullest extent possible, filter and reuse thinners and solvents. Dispose of excess liquids and residues as *hazardous wastes*.
- Paint out brushes on newspaper, allow paper to dry and dispose of as trash.

## Recycle / Reuse Leftover Paint

Leftover paint should be used up, recycled as primer, left on the job site for the customer or donated to charitable organizations or theater groups.

## Recycle / Reuse Solvents and Thinners

The life of solvents and thinners may be extended by using a three-stage rinse for brushes and equipment and by filtering out solids. In separate containers, perform the first rinse, second rinse and third rinse. Solvents may be hazardous waste if they contain lead or mercury, or are ignitable (flammable). When the solvent or thinner just can't be cleaned up anymore, a hazardous waste hauler can dispose of it.

### Information Resources

Waste Minimization and Pollution Prevention Information-----	873-7004
Landfill Information-----	836-8795
Environmental Health Dept-----	768-2600
Storm Water Hydrology-----	768-2650
Air Quality Assistance Program-----	768-1930
National Lead Information Center:	
To request information packet: 800-LEAD-FYI	
To ask questions:-----	800-424-LEAD
New Mexico Lead Hotline -----	505-827-3709



# Best Management Practices for Paint Contractors



**Pollution Prevention Program**  
Wastewater Utility Division  
City of Albuquerque